3GPP TSG SA WG3 Security — S3#25 **S3-020476**
8 - 11 October 2002
Munich, Germany

3GPP TSG-SA WG2 meeting #26 **Tdoc S2-022611**
Toronto, Canada, 18th – 23rd August 2002

Title:	LS on 3GPP System to WLAN Inter working architecture
Response to:	LS Tdoc S2-022255 on 3GPP System to WLAN Inter working from SA3
Release:	6
Work Item:	3GPP System to WLAN Interworking
Source:	SA2
To:	SA3
Cc:	SA1

Contact Person: Magnus Olsson
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Attachments:

SA2 would like to thank SA3 for their LS in S2-022255. SA2 welcomes the SA3 WI on WLAN Interworking and wishes further cooperation and the stage 2 definition of this feature.

The intent of this LS is to propose a work split between SA3 and SA2, as well as to provide feedback on SA3 questions and comments to the current work in SA2.

General
SA2 has been discussing access control and charging functionality for realising scenario 2, as defined in TR 22.934. This is assumed to be realised by a AAA architecture where the authentication is performed in the home network. Furthermore, SA2 has chosen EAP as the mechanism to realise an authentication framework for WLAN access authentication.

Work Split

- Security framework : SA3 would be responsible for the security framework, e.g. security features on relevant interfaces.

- EAP Methods : Though specific methods have been identified by SA2, i.e. EAP-SIM and EAP-AKA, SA2 doesn't not have the expertise to specify the methods to be used on top of EAP. Thus SA2 wishes that SA3 would design the authentication methods to be used on top of the EAP framework.

In order to ensure consistent stage 2 definitions across different groups, SA2 would like SA3 to provide feedback on security related decisions that may impact the architecture definition.

Question on identity protection

In the case of EAP-SIM and EAP-AKA, it is SA2 current working assumption that temporary identity should be used to ensure the same level of identity protection as in current 2G/3G networks. SA2 would like SA3 to provide feedback on this matter since it impacts the definition of network elements, i.e. where to allocate and store the temporary Identity.

Feedback on SA3 comments/Questions

SA2 would also like to provide the following feedback to SA3 comments on TR 23.934

1. Which of the scenarios, as defined in the SA1 Feasibility study, does the TR apply to, and what are timescales for the completion of the architecture work for the other scenarios. ?

Answer : SA2 will specify the Access control and Charging functionality as a first step. SA2 will look at the other scenarios in R6 if time permits. However the other scenarios should build on the access Control and charging functionality defined for scenario 2.

2. SA3 believe that an important requirement will be to state that the level of security protection shall be equivalent to that specified for UTRAN

Answer: SA2 recognises that WLAN has a radio network property as well as a network allowing access to services. In that sense WLAN appears as a domain. Thus WLAN security requirements should be aligned with those of the PS domain.

3. Are the AP and Access Server implemented in the same node? If these can be separated, what is the protocol used between them?

Answer : SA2 assumes that WLAN is a communication system giving access to IP networks. However the internal architecture should be outside the scope of 3GPP. We wish however to point out to SA3 that IEEE 802.11 WNG, ETSI BRAN and MMAC are cooperating with regards to WLAN – 3G Interworking and that further information on that matter could be provided to them.

4. The authentication methods described seem to rule out the use of an application layer user authentication mechanism, using the 2G/3G Network, such as SMS of credentials to the user - is this intentional ?

Answer : EAP-SIM and EAP-AKA are the only methods identified by SA2. Other methods have been discussed but there was no agreement to include them at this point.

5. Is it intended that the solution can be used across Bluetooth and Hiperlan bearers?

Answer : The architecture is intended to be generic and the protocols on the 3GPP defined interfaces should be identical independently of the wireless link layers i.e. IEEE 802.11, Hiperlan 2, MMAC, bluetooth.

6 Care is needed with the use of the term UE e.g. the UE (potentially equipped with UICC card) in section 6.1.1.3 as it is SA3 understanding that the definition of UE includes the UICC.

SA2 has discussed this issue has been taken into consideration.

2. Actions:

To SA3 group.

ACTION: SA2 asks SA3 to provide feedback on the work split proposal as well as on the issue of identity protection.

3. Date of Next 3GPP TSG SA WG3 Security Meetings:

Meeting	Date	Location
S2#27	14-18 October 2002	Beijing, China
S2#28	11-15 November 2002	Bangkok, Thailand